

1—INITIALIZE DATABASE AND APPROVED LIST

2—RECEIVE DATAGRAM

3—IDENTIFY DATAGRAM TYPE

IF ATM SIGNALLING, ALLOW ACCESS,
RECORD, AND COMPARE CONNECTION
REQUEST TO DATABASE

IF CONNECTION REQUEST APPROVED, ADD IT
TO APPROVED LIST AND RETURN TO STEP 2,
OTHERWISE, JUST RETURN TO STEP 2

IF ATM DATA AND ON APPROVED LIST, ALLOW
ACCESS, RECORD, RETURN TO STEP 2

7—IF ATM DATA AND NOT ON APPROVED LIST,
REJECT DATAGRAM AND RETURN TO STEP 2

FIG. 1 (PRIOR ART)

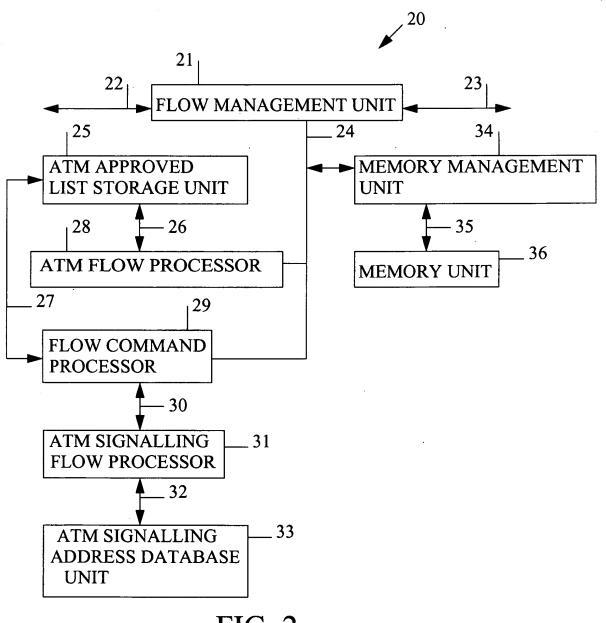


FIG. 2 (PRIOR ART)

41 -	INITIALIZE DATABASE, APPROVED LIST, AND DISAPPROVED LIST
42 —	RECEIVE IP DATA PACKET
43 —	COMPUTE FLOW TAG USING IP DATA PACKET
44 —	DISCARD IP DATA PACKET AND RETURN TO STEP 42 IF FLOW TAG ON DISAPPROVED LIST
45 —	ALLOW IP DATA PACKET ACCESS AND RETURN TO STEP 42 IF FLOW TAG ON APPROVED LIST
46 [—]	COMPARE FLOW TAG TO DATABASE IF FLOW TAG NOT ON APPROVED LIST OR DISAPPROVED LIST
47 —	DISCARD IP DATA PACKET, ADD FLOW TAG TO DISAPPROVED LIST, AND RETURN TO STEP 42 IF FLOW TAG NOT APPROVED BY DATABASE
48	ALLOW IP DATA PACKET ACCESS, ADD FLOW TAG TO APPROVED LIST, AND RETURN TO STEP 42 IF FLOW TAG APPROVED BY DATABASE

FIG. 3

- EXTRACT IP SOURCE ADDRESS, IP DESTINATION ADDRESS, IP PROTOCOL, DATA, AND ANY UPPER LAYER PROTOCOL HEADER FROM IP DATA PACKET

 SET FLOW TAG FIELD FOR THE UPPER LAYER PROTOCOL HEADER TO ZEROS IF NO SUCH HEADER WAS EXTRACTED

 SET A USER-DEFINABLE NUMBER OF BIT LOCATIONS OF THE FLOW TAG TO ZERO

 COMPUTE FLOW TAG ADDRESS
 - FIG. 4
- COMPARE FLOW TAG TO DATA STORED ON IP
 DISAPPROVED LIST, IF ANY, AT FLOW TAG ADDRESS

 IF FLOW TAG MATCHES DATA THEN
 ON LIST, OTHERWISE NOT ON LIST

FIG. 5

COMPARE FLOW TAG TO DATA STORED ON IP APPROVED LIST, IF ANY, AT FLOW TAG ADDRESS

79

IF FLOW TAG MATCHES DATA THEN ON LIST, OTHERWISE, NOT ON LIST

FIG. 6

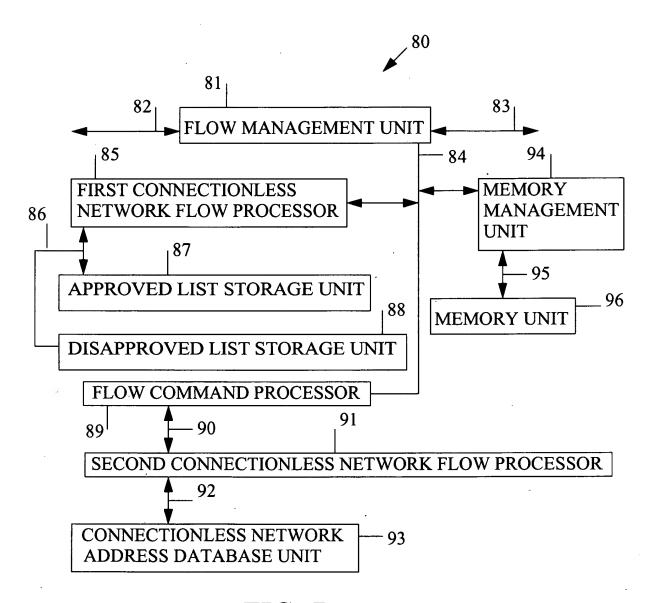


FIG. 7